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ABSTRACT

The problem of teaching reading in English to Mexican American children with Spanish as their primary language is considered in this paper. Literature reviews are done on research dealing with (1) linguistics, (2) language-modification approaches, (3) linguistic approaches, (4) language-experience approaches, (5) bilingual education, and (6) teacher-school factors. Conclusions on the basis of research in these 6 areas are given. Also given are implications and specific directions for (1) basic research in language and reading processes, (2) normative descriptive studies of processes involved in reading, (3) pre-school educational research and leadership, (4) research in the teaching of English as a second language and bilingual education systems, and (5) basic and applied research into current school practices, conditions, and possible promising innovations. An 88-item bibliography is appended. (NQ)

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ASSESSMENT AND RELATIVE EFFECTS OF READING PROGRAMS FOR MEXICAN AMERICANS

A Position Paper

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For

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Definition of the Problem

In spite of decades of rhetoric and recent but sporadic government support, Mexican Americans continue to be one of two major minority groups in our country in dire need of massive improvement in the quality of employment, housing, food and education. While literacy and education have traditionally opened doors in our society towards achieving mainstream status and the so-called "good life", assimilation and acculturation of ethnic minority peoples have been demanded as a major requirement for each of these societal attainments.

No other peoples are more dramatically and tragically symbolic of this oppressive process than Mexican Americans who have deeper roots in the lands of the Southwest and as proud, as rich and as glorious a history, culture and language as the peoples who have invaded their lands. For their refusal to part with their culture and language, Mexican Americans continue to pay dearly and our country suffers in the loss of tremendous potential human resources. The condition of life and chances for hope for low socio-economic Mexican Americans stands as a source of shame for our country and an indictment to our way of life.

This paper will not deal with philosophic, social, cultural, political and economic issues relating to Mexican Americans. While these issues are acknowledged to be central to any holistic approach to these educational problems, it is obvious than an interdisciplinary endeavor is required for such an undertaking. The problem that will be considered in this paper is concerned with the teaching of reading to Mexican American children whose vernacular often is Spanish. Questions pertaining to as complex a phenomenon as this will be explored through a review of research in six

general areas. It should be noted that teacher factors and some related sociological issues of direct pertinence to literacy attainment will be touched upon. However, it is recommended that each of these areas should be dealt with in a paper wholly devoted to these considerations alone.

State of Research in Problem Area

Approaches to the teaching of reading, while highly parochial in practice, have increasingly within recent years shown a tendency towards diversification. Frequently this has not been on the basis of definite scientific information. A very serious lack of experimental research and objective assessment of reading programs, particularly in which the subjects under study are Spanish speaking pupils, characterizes the state of affairs in the field of reading instruction. The few studies which are available dealing with these pupils have not gone beyond the most superficial exploration of grouped data. This state of affairs exists in spite of nearly five years of government sponsored projects in public schools, many of which continue to be refunded without any apparent requirements for evaluation.

The research and opinion that is presented in the six following sections, therefore, is sparse in specific attention to Mexican American children. The sections move from a consideration of general linguistic research as it applies to reading to various approaches in the teaching of reading applicable to Mexican American pupils. Research in language modification strategies in terms of their influence on reading is also reviewed and finally some selected research in teacher and school factors are presented. The attempt has been made to gather and introduce whatever seems to be directly or indirectly applicable to the specific problem. There is no doubt

that the state of research at this point in time is extremely poor and equivocal. What is presented, however, is suggestive of questions requiring further investigation.

Linguistics

A report of the National Conference of Teachers of English Task Force on Teaching English to the Disadvantaged (59) stressed the importance of developing skill in the spoken language -- even if that language is a non-standard dialect before introducing children to formal instruction in reading. Gibbons (25) observed a close relationship between reading level of children and their ability to understand the structure of sentences in the language in which they were reading. Kolers (39) demonstrated the congruance between what is written and what is comprehended in terms of clear semantic and informational correspondence. Ruddell (71) presented evidence indicating that the degree of comprehension in reading is a function of the similarity of written patterns of language structure to the oral patterns of language of the pupils in his study. Ladd (40) and Loban (50) and Hildreth (30) have also emphasized the cruciality of oral language fluency on success in reading. MacNamara (52) discussed the difficulties in school subjects which bilinguals would encounter when they are expected to read and learn in their weaker language. It was pointed out that unfamiliarity with various word meanings, phrases and grammatical structures would make comprehending of the meanings of phrases and passages difficult. MacNamara and Kolers (53) have presented evidence demonstrating that reading in a weaker language also takes more time than in a stronger one. In addition, Tireman (79) has demonstrated that errors in oral reading made by Spanish speaking subjects in the elementary grades can be attributed to pronunciation

difficulties. Wiener and Cromer (86) discussed four models of reading disability, one of which was based upon a "mismatch" between the language symbolized in print and the language of the reader. In the case of a child whose linguistic system differs from the system in which he is obliged to read, it was suggested that there would be difficulties in "elaborating the cues" in the patterns he is attempting to comprehend.

Language Modification Approaches

"Lack" of English language facility, therefore, has been universally implicated as the major difficulty for these children in attaining literacy in English. Since the evidence is that literacy in a given language is predicated upon oral-aural fluency in that tongue prior to reading instruction, attempts have been made on changing the language behavior of Mexican American children. Indeed, the earliest attempts to educate Mexican American pupils have been in the area of crash programs in English language development (3, 12, 33, 78). In this section selected research will be reviewed regarding the influence of such instruction in English on the attainment of literacy in English, as well as various issues in second language teaching.

Herr (29) studied the effects of one year of pre-first grade training on the reading readiness and achievement of first grade Spanish speaking children in New Mexico. An experimental group of 100 pupils were compared to an equivalent number of controls. The experimental treatment consisted of the development of social adjustment, vocabulary, physical, auditory and visual perception abilities, listening abilities, cooperativeness and social attitudes. Changes noted between the two groups were in significantly different IQ's, percentile ranks in readiness tests, and grade scores in achievement, all favoring experimental subjects. Horn (32), in

one of the First Grade Studies sponsored by the U. S. Office of Education (USOE), compared three methods of developing reading readiness in first grade Spanish speaking pupils. Group I received intensive language instruction in English using so-called "culture fair" science materials and audio-lingual techniques. Group II was given intensive language instruction in Spanish with the same materials and language techniques as Group I, while Group III received no intensive language instruction and only used the science materials. The experimental period was 140 days. No significant differences in a whole series of post-test scores were noted between treatment groups. The investigator discussed needs for improved measuring instruments for Spanish speaking children, programs of learning, training approaches for teachers and basic research. No attempt was made, however, to critically analyze the conditions within this study that would specifically explain the findings obtained. An older study by Fuller (22) with Spanish speaking children reported favorable results on first grade reading attributed to a speech training program in Kindergarten. Schwartzberg (72), however, presented evidence that a choral speaking program given at a later age (6th grade) to Puerto Rican pupils had no significant effect on Metropolitan Achievement Test scores when pupils who had such treatment were compared to controls. Painter (62) selected and structured a bridging vocabulary that was hypothesized to have a facilitating effect on reading vocabulary and achievement of 4th grade Spanish speaking pupils in Phoenix, Arizona. Experimental subjects who received training in such a vocabulary were significantly superior to controls in a vocabulary achievement test; however, the training did not result in significant differences in reading comprehension, English mechanics or spelling scores.

A number of researchers (63, 73, 76) have pointed out that children's

language changes dynamically in kind and degree both with maturity and as a result of environmental influences or due to an interaction between both nature and nurture. Lambert (44) has indicated that both an aptitudinal and attitudinal factor underlies development of skills in second language acquisition. In the case of Franco-American subjects, the manner in which the student faces and resolves culture conflicts determines his language development in French and English. He also demonstrated the progressively more difficult and complex nature of second language learning as the bilingual begins to approach native-like facility in the second language. At the lower levels of second language mastery, the more simple skills appear to be vocabulary and grammar acquisition; native-like mastery of accents, pronunciation, intonation and rhythm appear to be more complex in mastery and associated with the need for the learner to identify with members of other linguistic groups. It is quite questionable as to whether such factors as this have ever been accounted for in the typical Teaching English as a Second Language programs (TESL) imposed on Mexican American youth.

The context in which second language learning occurs has indeed been theorized also to have influences on the nature of subsequent bilingual styles (45, 85). Coordinate or "compound" bilingual systems could be developed. In the former situation, the two linguistic systems are functionally distinct while in the latter, the symbols of both languages function as interchangeable alternatives. The differences between these systems are apparently measurable (45); however, the measurement of individual variations in bilingual skills still remains to be developed (43). Direct methods of language teaching, in which language symbols are related to environment on a one-to-one basis, appear to result in coordinate bilingual training, while indirect

methods in which associations are made between the symbols of second language and equivalent symbols of first language, result in compound bilingual training. Wimer and Lambert (88) have presented evidence that the direct method is -relatively more efficient for vocabulary learning since there is a greater distinctiveness of elements to be learned by this approach.

The complexities involved in second language learning frequently influence the results of language training programs. Monroe (58) many years ago pointed out that in spite of much time spent in teaching English to Puerto Rican children, spoken English was still influenced by Spanish pronunciation and there was a great preponderance of inability to read in English. Cooper (17) reported an investigation in which Chamorro speaking children, who were given varying amounts of oral English instruction (one year in 1st grade vs. 1/2 year in 1st grade), were studied for the effects of such training on reading in English in 4th grade. While both experimental groups were superior in English speaking abilities after the end of grade one, such differences were not reflected in improved reading skill in grade 4. Control groups who were taught with standard basal readers rather than oral English training instruction equalled or exceeded both experimental groups in reading. A recent review of Head Start research (64) (Westinghouse Learning Corporation — Ohio State University), conducted for the USOE, has indicated that Head Start subjects were not significantly different from controls in language development and reading achievement tests. Short summer programs of this sort apparently produced little immediate traceable effects for these outcomes as measured in this study. Ching (15), however, reported a study with Hawaiian bilingual 3rd graders that did appear to present positive results. One-hundred and twenty-three 3rd graders in an experimental group, receiving

a creative and highly developed intensive English language program, were matched with a control group of pupils who received a typical form of language arts teaching. The results indicated that the experimental group was significantly superior to the controls in English language abilities and reading achievement. Apparently in this situation, the special methods, designed specifically for these bilingual pupils did make a difference after a prolonged and intensive period of training. Lorge and Mayans (51) have presented evidence that Puerto Rican pupils appeared to learn English better when placed in classes with English speakers.

Psycho-social perspective (65) apparently must not be discarded in second language learning with overemphasis on methodology and technology. "Anomie" (42), a feeling of not comfortably belonging in either culture could be involved in second language learning, particularly when assimilation and acculturation are involved in such learning. Jensen (34) and Singer (75) caution against improper handling of second language learning. Bilingual interference, shock, confusion and trauma could result. Rosen and Ortego (70) discuss second language instruction within the framework of the need to define the nature of a child's individual bilingual style, timing of second language teaching, learning context, methodology and individual differences. Poorly trained and unsophisticated teachers with cultural biases and profoundly ignorant notions concerning how language is learned are tragically too common in the schools. Goodman (28) presents an excellent discussion of the need to modernize teacher behaviors and attitudes pertaining to the language differences of their pupils. Snobbery and middle-class superiority, as well as prejudice and ignorance can be grotesquely demonstrated among teachers as Brooks (11) has pointed out.

Linguistic Approaches

Because of the obvious relationship between the reading process and linguistic development of children, no other field has been more prominent in the field of reading than linguistics. Bloomfield(8) was the first linguist who, several years ago, took the developers of basal reading materials to task, in this case for their failure to separate comprehension from what he considered to be the basic task of learning to read -- namely, decoding or associating spoken language with printed symbols. A series of instructional materials (9) have been available for some time based upon Bloomfield's linguistic assumptions. Lefevre (48) has criticized these materials because of their failure to account for the stress and intonation patterns of the English language. The rigid utilization and stress on learning to sound words in artificial, stilted and absurd sentences with uncommon rhythms in the Bloomfield-Barnhart reading program can be seriously questioned. Lefevre (49) and Goodman (27) recommend teaching children to read with materials based upon sentence patterns from the actual structure of their natural language rather than assumptions such as Bloomfield's.

Robinett (68) appears to have made an attempt to bridge this gap by developing several features in the Miami Linguistic Readers (a structured set of materials purported to be uniquely designed for bilingual children) based upon various linguistic premises. In spite of several reports regarding the nature of these materials and some use of this program for the last several years, no published research has been found in the literature in which the effects, if any, of use of these materials has been scientifically assessed. Arnold (4) has described a project specifically designed for Spanish speaking children involving the development of reading materials which have as a base

an oral English language program. The content of these materials was designed, among other things, to effect a closer relationship between reading and oral language -- but the latter is based upon preordained patterns of English language that are to be developed prior to and along with reading instruction in English, rather than the natural language of the children. No research is available investigating the differential effects of such a program on subsequent reading development. A number of isolated studies are available in which various linguistic approaches to reading have been investigated (7, 19, 20[a], 26, 46, 87). While the trend of these studies is favorable, no study unequivocally reported results favoring various linguistic materials. In addition, it was not possible to make comparisons between these studies due to wide differences in experimental designs. Unfortunately, in no case were Spanish speaking pupils the subjects of any of these investigations. There is no research available in this area to this writer's knowledge dealing with Spanish speaking pupils.

Language - Experience Approaches

Language-experience approaches (1, 47) to reading instruction are predicated on the direct utilization of the child's natural language in first and then in early reading experiences. The child reads what he has dictated or actually written from his own experiences and in his own linguistic style. In a 5 year experiment, Allen (2) studied reading growth of different populations of children taught by one of three approaches -- basal reader, individualized reading and language-experience -- and reported that pupils taught by the latter approach were equivalent or superior to pupils taught by the other two approaches. Spanish speaking pupils were the subjects in this study. Kendrick (37) explored the effects of this approach vs. traditional methods on

teaching reading, speaking, writing and listening. After one year, he reported on the strengths and weaknesses of both approaches. Hoihjelle (31) reported significant differences in social climate scores among teachers using the language-experience approach in the project conducted in San Diego County. Among the 27 First Grade Studies in the Coordinating Center in the Cooperative Research Program (83), McCanne's study (54) contrasted a conventional English readiness and a basal reading approach with a modified Teaching English as a Second Language (TESL) approach and a language-experience approach. The design of the study is open to criticism. Such areas as sampling procedures, the nature of experimental treatments, the depth of data analysis and the specific criterion measures are open to question. However, the study is among the few available in which a sample of Spanish speaking pupils were the subjects of an attempt to experimentally investigate a reading method variable. The findings of the study favored the basal reading approach; however, the language-experience and TESL approaches were found to be useful in oral vocabulary and writing development and were recommended as procedures that could supplement basal programs. Quite appropriately, the investigator indicated that the lack of teacher experience with the two experimental approaches could have had an influence on the more favorable showing of the more commonly used basal approach.

Bond and Dykstra (10), in a report summarizing the results of the 27 First Grade Studies, stated that no one method among the many investigated (linguistic and language-experience approaches included) appeared to uniquely overcome initial limitations of children as measured by the various readiness instruments in the project. However, among the recommendations made, a writing component, as in the language-experience approach, was identified as

an effective addition to a primary reading program. In a summary of the 2nd grade phase of the Cooperative Research Program, Dykstra (20) reported no differences in reading achievement between various basal and language-experience approaches. Serwer (74), in discussing the CRAFT project (Comparing Reading Approaches in First Grade Reading) in detail, highlighted significant aspects of the language-experience approach and factors within the project which she reasoned to be of great importance in contributing to growth in reading. The influence of in-service training, teacher guidance, supervision and assistance, as well as Hawthorne Effect were noted as contributing to improvements in teachers' performances. Inadequacies in criterion reading measures, a problem of universal difficulty in reading research, were also highlighted. The writer pointed out that the language-experience approach appeared to provide a beneficial thrust in vocabulary development and growth in syntactic structures and concept development. Stauffer and Hammond (77), reporting the results of the third year follow-up of their 1st grade study, strongly suggest that the language-experience and language arts approaches to reading throughout the primary grades will result in significant benefits which they attribute to the functional use of all communication skills on an interacting basis. Tireman (80), Meriam (55), and Potter (67), each working with Spanish speaking children have presented evidence supporting an "activity" approach to reading in which charts based on the experiences of the children are used rather than books for the purposes of eliciting greater meaningfulness and interest.

Bilingual Education

Many writers have recommended bilingual education (6, 23, 24, 60, 81) in which educational experiences are provided beginning with instruction

in the vernacular or mother tongue of children — in the case of Mexican American children, Spanish — rather than in the national language — English. At the same time, English, the weaker language for most of these children, is taught as a second language. The ultimate goal is a functional form of bilingualism in which facility in both languages is developed so that communication and learning can occur with either language as the medium. Along with psycho-cultural advantages and the preservation of cultural and linguistic resources of our peoples, bilingual education has multidimensional possibilities. Kolers (38) has demonstrated that bilingual students whose mother tongue is French comprehend reading materials in their native language better than in their second language — in this case, English. Kellaghan and MacNamara (36) point out that bilinguals' reading attainment in their second language falls short of reading in their native tongue, due to interferences in verbal processing. They suggest that these interferences may result from the fact that messages in the second language carry more information than equivalent messages in the native languages, thus imposing greater requirements of time for decoding. There is no doubt that a substantially positive effect on learning to read will occur when the child (particularly a poverty child) is introduced to reading in a linguistic system that he speaks and understands rather than one in which he is weak, in spite of the former being one other than the national tongue.

Modiano (57) reported the results of a study conducted in Chiapas, Republic of Mexico. Primary grade Indian children in Mexican Federal schools, where instruction in Spanish was conducted, were compared with Indian children attending a bilingual school in which reading was first introduced in their mother tongue — Indian. Pupils introduced to reading in their mother tongue

were superior to controls in subsequent reading comprehension in Spanish. Kauffman (35) also reported favorable results attributable to vernacular teaching in an experimental study in which Puerto Rican junior high school pupils, who were behind grade level in reading in English, received reading instruction in either English or Spanish. The results indicated some evidence of positive transfer of learning from instruction in reading Spanish to reading ability in English and greater reading ability in Spanish as a result of the direct instruction in this medium. Since the control subjects did not apparently receive equivalent amounts of time in English reading instruction, this study is of limited value. Mermelstein and Fox (56) have described a project with Puerto Rican 7th graders in which a curriculum is discussed based upon utilization of the pupils' native language and culture. The writers fell far short of minimal criteria for a valid experimental study, however, when they attempted to interpret the results as if they had conducted a controlled experiment. Under the auspices of the United Nations, an international committee of authorities (82) has declared that "it is axiomatic that the best medium for teaching a child is his mother tongue". The report emphasized that children should begin formal education in their mother tongue.

The existence of bilingual education programs such as in San Antonio and Laredo, Texas, and DadeCounty, Florida, is well known and several descriptions of these programs can be found in the literature. There are no scientifically designed studies or assessments of these projects in spite of several years of operation. The reports available, however, while non-scientific, overwhelmingly endorse these endeavors. Van Meter and Barba (84) have pointed up the shortage of such programs and the lack of innovation in

differentiated educational programming for Mexican Americans. Lamanna and Samora (41) have presented recent data demonstrating the wide and uneven improvement of educational status for Mexican Americans in which the more advantaged are outdistancing in greater degrees the less advantaged. No doubt the more advantaged, through assimilation and acculturation, can succeed in typical school programs. These are the programs that are universally most available. Bilingual educational programs are not available in adequate enough numbers to help the less advantaged Mexican American child move outward as his more economically advantaged middle-class brothers are able to do.

Teacher - School Factors

Bond and Dykstra (10) and Dykstra (20) have generalized from the evidence in both the report of the 1st grade and 2nd grade follow-ups of the Cooperative Research Program in First Grade Reading, regarding the influence of teacher and school district factors over intra-method variation in reading achievement of the first grade pupils in these studies. These writers have reported that when initial pupil characteristics were statistically controlled, pupils in certain school districts were noted to be better readers than pupils in other systems. In addition, within given methods, when pupil characteristics were controlled, pupils in different classrooms achieved differentially.

Chall and Feldman (14), in one of the First Grade Studies, demonstrated a discrepancy between what first grade teachers reported they did in reading instruction and what they were observed doing. Variability in teacher implementation of a given method and significant relationships between certain

teacher characteristics and achievement in first grade reading were also noted. Fishman (21) and Rosen (69) in discussions of bilingualism, its prospects in the U. S., and needed research, respectively point out the need to attract teachers who understand and are committed to such concepts as cultural pluralism and bilingualism. The need to recruit teachers of language who are also native speakers is critical. Becker's classic study (5) has also demonstrated a consistent movement of teachers away from slum schools. North (61) presented evidence regarding teachers' perceptions of poverty children and the degree of frustration in teaching in terms of the number of poor children in their classrooms, age and socio-economic background of teachers and stereotyping forms of perceptions regarding poverty children. Davidson and Lang (18) reported a study on self-concepts, behavior and achievement. The findings of interest was the decline in teachers' attitudes of favorability to children with decline in academic achievement, irregardless of socio-economic class, and the decline in favorability with social class irregardless of achievement levels. Neither of the three studies reported dealt with Mexican American children; however, the findings could be generalized to these children. Caplan and Ruble (13) reported a study conducted in Albuquerque, New Mexico, which investigated other factors which might influence school achievement. The influence of so-called "lack" of communication skills and the adverse effect of this on achievement tests were pointed out, along with the differing value systems between home and schools, differing personality traits, and other cultural differences.

Clark (16) strongly suggests that the role of the teacher in eliciting maximum academic performance requires rigorous and systematic research. It would seem critically important to have information available regarding the

influence of "mismatch" between teachers' cultural values and expectations and pupils' values as this relates to educational achievement and psychological climate. The interaction of the teacher and pupils in the learning transaction has been traditionally ignored in the research literature, particularly where this area applies to pupils who are culturally and linguistically different from the majority of their teachers.

Conclusions on the Basis of Given Research

Conclusions will be presented in summary form based upon the six areas reviewed in the body of this paper.

Linguistic Research

1. Research reports in linguistic science with special reference to the development of language skills and reading ability for Mexican American children are exceedingly scarce.

2. What research evidence and expert opinion that is available overwhelmingly supports the cruciality of aural-oral grasp of the language in which children are to receive reading instruction. The practice of providing only reading materials written in English to pupils whose mother tongue is Spanish and who do not have fluency in aural-oral English will predictably influence pronunciation, accent, intonation, rhythm, rate of oral reading performance, and efficiency of silent reading comprehension. The facility with which these children learn to process messages from print in English is subject to interference on the basis of differences in concept labelling, grapho-phonemic associations, semantics, morphological and syntactical structures between Spanish and English.

3. Many of these children, hence, do manifest reading retardation in English content and tests of reading. The evidence is clear that a very high proportion of Mexican American children are below national "norms" in reading attainment. Hence, they are perceived as being unable to learn in our English textbook-oriented elementary and secondary schools. The high drop-out rates in secondary schools and the low enrollments of Mexican Americans in colleges and universities reflect broader issues than English language facility and reading abilities; however, much can be done in these two specific areas towards remedying some of these conditions.

4. In this regard, the diagnosis of reading difficulties with Spanish speaking pupils who appear to demonstrate reading retardation in English materials is complicated by phonemic differences which would affect oral reading diagnosis and linguistic interference which would influence comprehension and rate of reading. A new and more sophisticated system of reading measurement and appraisal with greater attention to linguistic factors is seriously needed both at the classroom and clinical levels.

5. The influence of early and precipitous reading instruction in English linguistic content which is also stilted and artificial, as is found in typical early basal readers is thought to be one key factor in the reading underachievement of certain groups of Spanish speaking children. No systematic research, however, is available that differentially explores this factor with Mexican American children differing in the kind and degree of linguistic styles they bring to school, their endogenous trait differences, their socio-economic background, as well as familial, local, and geographic influences.

6. Various traditional basal and supplementary approaches to reading, particularly since they are in such heavy use, could receive detailed

scientific assessment in terms of the interaction of these materials in learning for pupils who differ as individuals both in terms of endogenous and exogenous traits.

Language Modification Approaches

1. The research in this area is generally not sparse. A number of studies exploring the effects of various English language training programs on growth in English language facility and reading abilities of different populations of pupils is available.

2. In general such studies support the conclusions that the nature of the program — namely, the creativity, design, and sophistication of the experiences provided appear to have a direct influence on the improvement of language abilities. If such programs are attuned to unique group, personal, and regional geographic needs of pupils, there could be significant results. The length of time given to such a program, the attention to psycho-cultural factors, the contacts the learners have with native speakers, the integrated social nature of the learning context and content for learning all appear to be significant variables. Narrowly oriented short-term language training programs around choral reading or vocabulary development alone have been demonstrated to result in minimal, if not insignificant, outputs with the particular samples of pupils studied. There are no studies that adequately explore such programs and their effects on Mexican American pupils of different backgrounds, abilities, and characteristics.

3. Attention to individual differences in language learning aptitudes and attitudes, the measurement and planning for individual variations in language style, the methodology and sequencing of language learning are

hence of crucial importance in terms of English language training for Mexican American children. These areas remain unexplored. Evidence is available regarding the influence of development as well as environment in second language acquisition. All authorities urge that teachers of English as a second language must be trained who are alert and sophisticated in many more areas than the technology and methodology of TESL. No research is available exploring the demographic characteristics of those who are successful and unsuccessful teachers in this area nor are studies available in which classroom climate and methodology are studied together. While no research is available regarding the personal characteristics, styles, and behavior of individuals who are successful in teaching English to Mexican American youngsters, observation and experience suggests that maladroit, fussy, biased and ineffectual teaching of English to Mexican American children who are manhandled by teachers of English is common. Such teachers know little, if anything, of the developmental nature of language acquisition, no less the influence of psycho-social and cultural factors on second language learning. Their influence on these children is worse than negative.

4. The research evidence regarding the influence of early pre-training in English on subsequent achievement in reading English with Mexican American children is fragmentary but suggestive. In general the few studies available have reported negative results; particularly prominent among the variables which seem to influence such findings are such factors as the way programs are undifferentiated for individual needs, regional and socio-economic factors, overly or underly structured, narrow and unimaginative, too short and inadequate in terms of time, little or no articulation of language training with reading instruction, unsuitable instruments to measure characteristics

and outcomes, etc. Apparently far more sensitively designed programs must be researched in this area to tease out information regarding the specifics in various English language programs which benefit clearly described groups and individual children in reading. Many are pointing out that learning a language should be kept independent from learning to read in the new language or both learnings will be muddled. Perhaps future research should concern itself with the timing of second language teaching in English and its relationship to timing the introduction of reading for different groups of Mexican American children.

Linguistically Oriented Approaches

1. Approaches to reading instruction based upon various linguistic assumptions have had no research attention in terms of their effect, if any, on the reading growth of different populations of Mexican American pupils. Several approaches have been in use for a number of years with little apparent attempt to scientifically explore, no less differentially assess their results. There is a critical need for well-designed studies which differentially assess the effects of materials on well-described samples of Mexican American pupils.

2. Assumptions underlying certain so-called linguistic approaches to reading, based upon the notion that oral-aural fluency in English can be effectively taught to any or all Spanish speaking children prior to or along with instruction in reading in English, are questionable but insufficiently researched. Such simplistic approaches appear too unidimensional, particularly when applied to Mexican American children from hard core poverty backgrounds who have little, if any, English facility and who experience economic, social and psychological manifestations of privation, isolation,

neglect and prejudice. Research in language development has made substantial contributions to our knowledge and information regarding second language teaching. Oversimplified attempts in teaching English based upon various forms of linguistic swamping that does not account for critically relevant factors in second language learning have been demonstrated to be ineffective. in various studies presented in this paper. Various of the many linguistic approaches appear to have some undetermined utility for teaching reading to Mexican American children. Each of these approaches require empirical study in terms of their differential effects on the reading abilities of specific groups of Mexican American children.

Language - Experience Approaches

The language-experience approach or an integrated communications skills approach to reading instruction seems to also hold some promise for future experimentation in terms of the effects of such procedures on reading and language achievement of Mexican American children. A small body of literature supports the contention that advantages will accrue from reading approaches that utilize directly the language styles and life experiences of children; that integrate the receptive (listening, reading) and expressive (writing, speaking) skills in a functional manner and that provide an activity-oriented and meaningful series of experiences for young pupils. However, a very highly trained, capable and sophisticated teacher is required and the climate of the school district is important. Research regarding this approach and modifications of this approach with specific groups and individuals among Mexican American pupils is critical.

Bilingual Education

1. The more ideal form of instruction for many Spanish speaking children seems unquestionably to be instruction which from the onset is conducted by native speakers in their mother tongue. This might be one factor that makes the so-called "advantaged" pupils of our society achievers and the so-called "disadvantaged" the underachievers.

2. A bicultural, bilingual curriculum is much broader, however, than conducting instruction in Spanish. A number of studies support generalizations regarding vernacular teaching of reading; however, many complex questions and issues are involved in bilingual-bicultural education. Attention must be directed to the critically significant research information obtained from the First Grade Studies. For it might be that for those institutions and workers who had previously been unable to resolve these educational problems, bilingual education will be passively accepted, thoroughly misunderstood, and hence, typically maladroitly fumbled.

3. Research in the technology, methodology and organization of bilingual, bicultural schools for Mexican American and Anglo American children is almost totally lacking. Each segment of such an approach, including the pupils, teachers, materials, organization and content of learning requires serious scientific exploration. At the moment, too few programs such as these exist and no research reports scientifically assessing such programs are available, in spite of the universal recognition of both the values of such programs and their need.

Teacher - School Factors

1. There is research evidence available obtained from studies with pupils from many different backgrounds that school districts, schools and

teacher factors might perhaps have as critical an influence on reading acquisition as does various content, linguistic and methodological considerations. Time and space do not permit as detailed a presentation of the research as is possible and it is strongly recommended that an exhaustive review be attempted elsewhere in this particular area. There is unquestionably far too little research available in this area dealing specifically with schools and teachers whose pupils are of Mexican descent. There is great resistance to this type of inquiry for it diverges from the safety and neutrality of concern for materials and methodology of instruction.

2. Major problems in obtaining research have been both in the areas of difficulty in obtaining access to schools and insufficient research personnel available and interested in these socially and psychologically loaded issues. Financial support for such projects has been minimal. The widespread interest among both public school and college personnel in educational materials and technology has also been prevalent as a result of institutional reenforcers at all governmental levels for such emphases. One might note that the heavy dependence of colleges and universities on the good will and support of local school systems as sources for student teaching opportunities, actual training facilities, and potential graduate students sometimes results in various forms of pressures which also mitigate against such research.

3. Practices and procedures in publically supported schools of education located in areas of Southwestern United States, wherein large proportions of the population are of Mexican descent, have yet to be examined objectively. Many teacher-education programs continue to have few, if any, courses uniquely designed for young people being trained to work with Mexican American children. Some schools of education in these areas have few, if any,

staff members of Mexican American descent. The number of Anglo-American faculty interested -- no less committed to research or improving teacher training for these children -- is usually minimal. Such institutions are grotesquely inadequate in the development of young teachers differentially trained for educating the children of all of the peoples in our society -- but uniquely irresponsible in meeting the challenge of educating Mexican American children. They continue to exist in publically supported institutions.

4. Some evidence is available regarding the needs for new forms of teacher and leadership recruitment, training, motivation and retention. The young, often well-meaning teachers, inadequately trained for educating Mexican American children, probably experience tremendous frustrations which result in either teacher drop-out or the development of unfortunate attitudes and behaviors as to what to do with and how to handle Mexican American children. Widespread abuse of teachers' power and authority over children of the poor exists throughout the country. Little leadership or help is provided teachers except when they diverge from school district norms. Then, leadership is overt, punitive and heavy-handed.

5. Attitudes and expectations towards pupils who are culturally, socially and linguistically different, as well as economically deprived, require as much attention as do methodology, materials, and organization of teaching. Vigorous, systematic and comprehensive research is required along with action-oriented innovative teacher training programs. The very least that one would expect would be to require every teacher to be able to communicate in Spanish with her pupils. There has been little apparent exercising of imaginations in teacher training institutions -- perhaps they require remodeling along with the schools before programs can be significantly improved.

Directions for Future Research Undertakings

Some Implications

A broad model has been presented around a review of six areas which appeared to be pertinent to the assessment of reading programs for Mexican American pupils. The findings have been systematically reviewed in Section III. Another series of points will be made in this section regarding future undertakings.

1. It must be obvious that research, development, action-oriented programs, innovative teacher education programs, graduate education, and interdisciplinary support regarding the education of Mexican American children is insufficient, uncoordinated, fragmentary, non-cumulative, and hence, unsatisfactory, particularly to those of us who are urgently concerned with improving educational conditions for these children. This has been so for a very long time, yet little seems to be happening significantly to change these conditions.

2. Basic as the ability to read is to academic success, citizenship and economic self-sufficiency, the quest for literacy for all of the children of all the peoples in our society continues to remain illusive. William S. Gray in 1960 suggested the availability of some 4000 studies pertaining to reading in its various aspects and, no doubt, there are probably close to twice as many today. Yet we are no where near having attained a science of reading. Today millions of young Americans, particularly youngsters of minority peoples in poverty circumstances, are being inadequately educated.

3. There is thus relatively little research available that permits the scientific prediction and control of instructional events leading to literacy for any group of children -- even the children of privileged Americans,

yet these latter children are unequivocally the best educated children in our society. The research as it exists is simply a loose collection of many poorly-designed but few well-designed studies which tend more often to be inconclusive, unconnected, uncoordinated, and hence, highly contradictory, spotty, incomplete and often irrelevant.

4. A major consideration, therefore, is that comprehensive applications, interventions and strategies towards overcoming the reading difficulties of Mexican American children and for that matter, all minority children, might not be immediately forthcoming until more adequate and scientifically based theory, prediction, control, explanation and understanding is made available regarding basic language and reading processes themselves. Their interaction with the fearfully complex patterns of intrinsic and extrinsic pupil variability, teaching behavior, classroom and learning environments and materials and methodologies of instruction might be another and subsequent aspect of the problem.

5. We have, in short, little basic information upon which to draw for conclusive generlizations. Many opinions, much speculation, reams of rhetoric — including the writer's own — is abundant. Everyone viewing the phenomenon from their own narrow framework, often resulting in the generation of simplistic, unsophisticated and overassured notions. Faulty prediction and tenuous control of events with little or no scientific assessment characterize far too many of the all too few innovative projects designed specifically for and about Mexican American children. There is a need for basic data, applied data, and interactive phenomena, but somewhere, somehow is the need for research stimulation and coordination.

6. Obsessed with experience in the absence of understanding and explanation with no framework or central theory to explain the complexities, all that often seems to remain is the expression of preferences which are, in the final analysis, biases and pet notions. Anti-intellectual, anti-scientific research reactions condemning and discounting the value of objectively-oriented experimental methods frequently result from conditions such as these, often due to the urgency of the need for reforms. There should be concern for the danger that exists regarding the loss of faith and interest in scientific inquiry as a solution to some of these issues. Little of significance will occur unless the scientific community that should be concerned with these problems takes the very important step necessary of getting about the business it was trained to do in a more effective manner. Theory building and then nationally coordinated research activities, all carefully designed to move from basic to applied research in the same manner that the space effort was systematically able to move is called for.

Some Specific Directions

Basic Research into the Language and Reading Processes:

An entire theoretical framework is required for a long range inquiry into the nature of language development for various groups of children of Mexican American families who are living in both similar and different linguistic and social contexts from typical mainstream Americans. Their early language learning experiences require careful study, descriptions, and scientific explorations into first reading experiences both in the vernacular and in the national language.

Normative Descriptive Studies of Processes Involved in Reading:

The bases for reading involve, among other things, conceptual, cognitive, linguistic, intellectual, perceptual, psychological and physiological variables. Detailed analyses of these characteristics in Mexican American children with special reference to the influence of such variables as environment, subculture, economic and psychological conditions on the development of these key processes would be useful in many possible ways from curriculum and materials development to teacher training and long-range school planning.

Pre-school Educational Research and Leadership:

A coordinated series of university affiliated laboratories of child development have been long required in the Southwest. Outstanding teams of university professionals could begin observing and collecting data as well as establishing model Early Childhood Educational Stations that could benefit children immediately, set the stage for local school endeavors staffed and organized on these models, and provide vital research information. Such stations should play leadership roles in their communities and local geographic regions in disseminating information, materials, and help to schools, neighborhoods, and families interested in these activities. These Early Childhood Laboratories or Stations should lead in stimulating a drive for year-round nursery and pre-school educational programs that should have built-in research and assessment possibilities. They should provide supervisory and consultative assistance and probably serve as an intermediary between governmental agencies and local schools soliciting funds for such enterprises.

Research in the Teaching of English as a Second Language and Bilingual Educational Systems:

Universities, private agencies, neighborhood groups and local schools should all be considered as potential organizations for second language learning. Wherever such learning is in progress, an experimental tone should permeate around concerns for obtaining data regarding methodology, materials, timing of second language learning, individual pupil learning styles and responses, learning contexts, psycho-cultural influences, etc. The complex issues involved in establishing bilingual-bicultural ducational programs require immediate scientific investigation, as well as vast funding for the establishment of a whole chain of such educational endeavors across the Southwest. It might be necessary for such programs to be free of local school control — renting buildings, hiring staff, purchasing materials, etc. — and to be independent endeavors. Defining objectives, materials, procedures, pupils, forms of organization and data collecting procedures for scientific assessment must be prior, not subsequent to the establishment of such bilingual centers. Each center, however, must have freedom to flexibly develop a system for its own unique local needs.

Basic and Applied Research into Current School Practices, Conditions, and Possible Promising Innovations:

The entire range of areas reviewed in this paper requires immediate coordinated research activity. Linguistic assumptions, materials, language experience approaches, basal reading approaches, bilingual appraoches, and teacher, school and district conditions must be differentially assessed in terms of their specific impact on pupil's learning. A national Bilingual-Bidialectal-Bicultural Research Foundation should be organized for the sole purpose of gathering the necessary resources together for an inter-disciplinary research endeavor on a national level.

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